

INTERAGENCY AGREEMENT BETWEEN THE

U.S CONSUMER PRODUCT SAFETY

COMMISSION AND

THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

1. Introduction

The U.S. Consumer Product Safety Commission, hereinafter referred to as CPSC, and the National Institute of Standards and Technology, hereinafter referred to as NIST, hereby agree that NIST shall provide technical support for planning and conducting large scale fire tests of upholstered furniture and provide results to CPSC, in accordance with the terms and conditions set forth below. This Interagency Agreement (IAG) will allow CPSC to carry out its work in the area of product safety standards development.

2. Title

"Upholstered Furniture Large Scale Fire Tests"

3. Purpose

The purpose of this IAG is to conduct large scale fire tests of upholstered furniture to obtain information on the potential effectiveness of the bench scale performance requirements of the CPSC staff's draft standard (draft standard) in reducing the flammability and thereby, the risk of death and injury from ignition of upholstered furniture.

4. Background Information

The CPSC staff has developed a draft mandatory safety standard to address the fire hazard associated with smoldering and open flame ignitions of residential upholstered furniture. The draft standard contains a series of bench-scale tests, based in part on existing flammability standards, to evaluate the performance of upholstery materials with respect to both smoldering and open flame ignition.

In the draft standard, the flammability performance of materials is evaluated with mass loss measurements. In smoldering bench scale tests, the mass loss of the substrate is measured at the end of the test duration. In open flame bench scale tests, the mass loss of the combustible portion of the test

assembly is measured during the test duration. CPSC staff bench scale test data indicate that mass loss is an effective performance measure to differentiate between upholstery materials with improved ignition resistance and those that readily ignite.

In this study, large scale fire tests will be conducted on combinations of upholstery materials and finished furniture items using both open flame and smoldering ignition sources to provide information on the effectiveness of the bench scale test requirements in the draft standard. This will be accomplished by measuring the combustion parameters and test room conditions of large scale mockup assemblies of upholstery materials and on select finished furniture items. The results of these large scale tests will be compared to bench scale mass loss data for the same upholstery material combinations. This comparison will provide information on the ability of the bench scale test requirements in the draft standard to predict large scale behavior.

5. Statement of Work

The following tasks shall be completed by NIST under this IAG:

- Task 1.** NIST staff will purchase the necessary materials and fabrication services of large scale test cushion combinations and finished furniture items using specifications and sources provided by CPSC staff.
- Task 2.** NIST staff will assist CPSC staff in developing the open flame large scale test procedure.
- Task 3.** NIST staff will design and construct the necessary test room, apparatus, equipment, and sample conditioning as needed to conduct large scale tests. The facility shall be capable of recording test parameters on the fire performance of each of the test assembly combinations and information on room tenability conditions during tests, including, but not limited to:
 - Continuous mass loss over time measurements of large scale test assemblies
 - Heat release rate and total heat of large scale test assemblies
 - Concentration levels of gases in the test room
 - Oxygen, Carbon Dioxide, Carbon Monoxide, Hydrogen Cyanide, and other gases as agreed to by NIST staff and CPSC staff
 - Smoke obscuration in the test room

- Height of hot gas layer from the ceiling of test room using 2 thermocouple trees at 1 foot spacing increments.

Task 4 Perform tests in accordance with the test procedure developed in Task 2.

Task 5 Provide a summary report that includes the data collected as specified in Task 3 for each test assembly.

6. NIST Furnished Materials and Equipment

NIST agrees to furnish all necessary personnel, equipment, materials, services, and facilities to complete the tasks listed in the **Statement of Work**.

7. CPSC Furnished Materials and Equipment

CPSC will provide NIST with material specifications and sources, and a test matrix, and assist NIST in test setup and performance, as needed.

8. Confidentiality Requirements

A. All information reported to or otherwise obtained by CPSC or its agents under the Consumer Product Safety Act (CPSA) and provided to or shared with NIST, which contains or relates to a trade secret or other matters referred to in section 1905 of title 18, United States Code, or subject to section 552(b)(4) of the title 5, United States Code, shall be held in confidence by NIST personnel.

B. To the extent permitted by law, including the Freedom of Information Act, NIST agrees not to release the identity of any manufacturer of any product being tested or reviewed (example: upholstery cover fabrics, foams, barrier materials) in conjunction with this IAG without the written consent of the CPSC.

C. All documents and other materials developed pursuant to this IAG shall have appropriate statements to indicate the work was performed pursuant to the IAG by NIST; that the documents and other materials produced are the views of the staff of NIST; and that although the documents and other materials may have been developed in conjunction with CPSC staff, the documents and other materials do not necessarily represent the views of the Consumer Product Safety Commission.

D. Any publications of or publicity pertaining to, the work performed under this Agreement shall include the following:

"This project was funded by CPSC. The content of this publication does not necessarily reflect the views of the Commission, nor does mention of trade names, commercial products, or organizations imply endorsement by the Commission."

9. Period of Performance

The period of performance shall begin on the effective date and shall not extend beyond 150 calendar days. This agreement may be modified by mutual consent of the CPSC and NIST.

10. Delivery of Performance

All deliverables required under the terms and conditions of this IAG shall be provided to the CPSC. The following items shall be performed or delivered to CPSC in accordance with the schedule below:

| Delivery Item | | Performance |
|---------------|---|---|
| A. | Purchase materials and fabrication of large scale cushions and finished furniture | Within 30 calendar days after IAG effective date |
| B. | Design and construct test room and instrumentation | Within 60 calendar days after IAG effective date |
| C. | Complete large scale fire tests | Within 120 calendar days after IAG effective date |
| D. | Provide summary report of test results | Within 150 calendar days after IAG effective date |

11. Schedule of Task Costs and Performance

| Task | Description | Est. Cost | Est. Time |
|--------|--|-----------|------------------|
| Task 1 | Purchase materials and fabrication of test assemblies | \$71,000 | 30 calendar days |
| Task 2 | Assist in finalizing large scale open flame test procedure | \$4,000 | 10 calendar days |
| Task 3 | Design and construct test room and instrumentation | \$7,000 | 14 calendar days |
| Task 4 | Conduct large scale tests | \$44,000 | 20 calendar days |
| Task 5 | Summary data report | \$4,000 | 45 calendar days |

12. Disagreements

In the event that a disagreement arises between CPSC and NIST under this IAG, the parties shall cooperatively resolve the disagreement among themselves. If the disagreement cannot be resolved between CPSC and NIST, then they shall agree to seek the assistance of a third party to resolve the disagreement.

13. Liaison Officers

A. NIST Project Officer

Thomas J. Ohlemiller
National Institute of Standards and Technology
Building and Fire Research Laboratory
Polymers Building # 224
Gaithersburg, MD 20899-8665
Phone: (301) 975-6481

B. CPSC Project Officer

Rohit Khanna
U.S. Consumer Product Safety Commission
Directorate for Engineering Sciences
4330 East-West Highway, Room 611
Bethesda, MD 20814
Phone: (301) 504-7546

C. CPSC Finance Officer

U.S. Consumer Product Safety Commission
 Directorate for Administration
 Accounting Operations
 4330 East-West Highway, Room 522
 Bethesda, MD 20814

Agency Payment Officer:

Phone:

14. Cost and Transfer of Funds

The total cost for this IAG is estimated to be \$130,000. The funding for this IAG will be provided by the CPSC with FY 2005 Operating Plan Funds.

15. Funding and Accounting Data

The transfer of funds shall be from CPSC to NIST through the On-Line Payment Collection (OPAC) system using the following accounting data:

Transfer from:

| | |
|----------------------------|-----------|
| CPSC | |
| 05-PS-EXOB-4200-21498-253A | \$130,000 |
| ALC: 61-00-0001 | |
| TIN: 520978750 | |
| DUNS: 069287522 | |
| US Treas Code: 6150100 | |

To:

NIST 929956050
 ALC: 13-06-0001
 DUNS:
 NIST Taxpayer ID Number: 530-20-5706

16. Authority

Section 27(g) of the Consumer Product Safety Act, (15 U.S.C. 2076(g)),

Section 29(d) of the Consumer Product Safety Act, (15 U.S.C. 2078(d))

17. FASA Compliance

As the servicing agency, NIST agrees to act in full compliance with section 1074 of the Federal Acquisition Streamlining Act (FASA) of 1994, entitled "Economy Act Purchases."

Approved and Accepted for
NIST

BY: Jon AlexanderTITLE: CHIEF FINANCE DIVISIONDATE: 8/8/05

Approved and Accepted for
CPSC

BY: Donna HuttonTITLE: Contracting OfficerDATE: 8/15/05